KAMRUI E3B

KAMRUI E3B Mini PC User Manual

Model: E3B

1. INTRODUCTION

Thank you for choosing the KAMRUI E3B Mini PC. This compact and powerful computer is designed for a wide range of tasks, from everyday computing to demanding applications and entertainment. Featuring an AMD Ryzen 7 5825U processor, 16GB DDR4 RAM, and a 512GB M.2 SSD, it offers robust performance in a small form factor. This manual provides essential information for setting up, operating, maintaining, and troubleshooting your device.

Image 1.1: Front and side view of the KAMRUI E3B Mini PC, showcasing its compact design and various ports.

2. PACKAGE CONTENTS

Please verify that all items listed below are included in your package:

- KAMRUI E3B Mini Computer AMD Ryzen 7 5825U
- Power Supply & Cable
- HDMI Cable
- VESA Mount and Screws
- User Manual (this document)

3. PRODUCT OVERVIEW

The KAMRUI E3B Mini PC features a comprehensive set of ports for versatile connectivity. Familiarize yourself with the port layout before connecting peripherals.

Front Panel Ports:

- **Power Button:** To turn the device on/off.
- **3.5mm Audio Jack:** For headphones or speakers.
- **USB3.2 Gen2 Type-A (x2):** High-speed data transfer (10Gbps).
- **USB3.2 Gen2 Type-C:** Supports DP1.4, 10Gbps data transfer, and PD output.

Rear Panel Ports:

- **DC (19V/3.42A DC):** Power input port.
- **HDMI 2.0:** Video output (4K@60Hz).
- **DP 1.4b:** DisplayPort video output (4K@60Hz).
- **RJ45 Ethernet Port:** For wired network connection (1Gbps).
- **USB3.2 Gen1 Type-A (x4):** Standard data transfer (5Gbps).
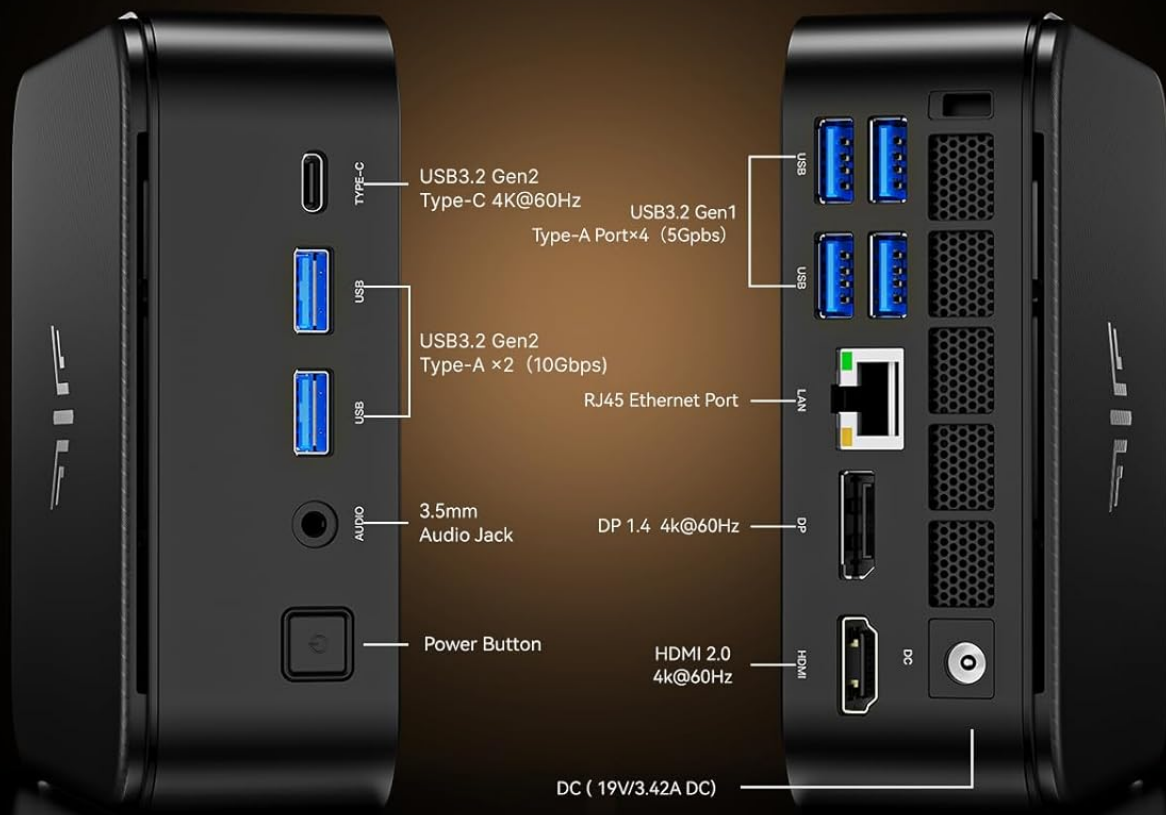
Image 3.1: Detailed diagram illustrating the front and rear expansion interfaces of the KAMRUI E3B Mini PC.

4. SETUP GUIDE

4.1 Connecting Peripherals

1. **Connect Display:** Use the provided HDMI cable or a DisplayPort cable to connect your monitor(s) to the HDMI 2.0 or DP 1.4b ports on the rear panel. For a third display, use the USB Type-C port with a compatible cable.

2. **Connect Keyboard and Mouse:** Plug your USB keyboard and mouse into any available USB Type-A ports.

3. **Connect Network:** For a wired connection, plug an Ethernet cable into the RJ45 port. For wireless, ensure your WiFi network is available.

4. **Connect Power:** Plug the power adapter into the DC input port on the rear panel, then connect the power cable to an electrical outlet.

4.2 Powering On

Press the power button located on the front panel of the Mini PC. The power indicator light will illuminate, and the system will begin to boot.

4.3 Initial Operating System Configuration

Upon first boot, the system will guide you through the Windows 11 Pro setup process. Follow the on-screen instructions to:

- Select your region and keyboard layout.
- Connect to a network (if not already connected via Ethernet).
- Sign in with your Microsoft account or create a local account.
- Adjust privacy settings.

5. OPERATION

5.1 Triple 4K Display Setup

The KAMRUI E3B Mini PC supports up to three 4K displays simultaneously, enhancing productivity and multitasking capabilities. Connect your displays using the HDMI 2.0, DP 1.4b, and the full-function USB Type-C ports. After connecting, navigate to your operating system's display settings to configure display arrangement, resolution, and orientation.

Image 5.1: The KAMRUI E3B Mini PC demonstrating its capability to support a triple 4K display setup for enhanced productivity.

5.2 Wireless Connectivity

The Mini PC is equipped with WiFi 6 and Bluetooth 5.2 for stable and efficient wireless connections.

- **WiFi 6:** Offers faster speeds (up to 2402 Mbps on 5GHz band) and improved performance in congested network environments compared to WiFi 5. To connect, go to your operating system's network settings, select your WiFi network, and enter the password.
- **Bluetooth 5.2:** Enables efficient data transmission for connecting wireless peripherals such as keyboards, mice, headphones, and speakers. To pair a device, go to your operating system's Bluetooth settings, ensure Bluetooth is enabled, and select your device from the list.

Image 5.2: The KAMRUI E3B Mini PC highlighting its WiFi 6 and Bluetooth 5.2 wireless connection capabilities.

5.3 USB Type-C Port Functionality

The full-function USB Type-C port on the front panel supports multiple capabilities:

- **Charging:** Can provide power to compatible devices.
- **Data Transfer:** High-speed data transfer at 10Gbps.
- **4K/60Hz Display Output:** Can be used to connect an additional 4K display.

6. HARDWARE EXPANSION AND MAINTENANCE

6.1 Memory (RAM) Upgrade

The KAMRUI E3B Mini PC is equipped with dual DDR4 SO-DIMM slots and comes with 16GB DDR4 RAM. It is expandable up to 64GB (2 x 32GB DDR4 3200MHz). To upgrade or replace RAM:

1. Power off the Mini PC and disconnect all cables.
2. Carefully open the chassis (refer to the detailed instructions in the full user manual for specific steps on opening the device).
3. Locate the RAM slots. Gently push the clips on both sides of the RAM module outwards to release it.
4. Insert the new RAM module(s) into the slots, ensuring they are correctly oriented, and push down until the clips lock into place.
5. Close the chassis and reconnect all cables.

6.2 Storage (SSD) Upgrade

The Mini PC has two M.2 2280 SSD slots: one supports M.2 NVMe/SATA, and the other supports M.2 SATA only. Both slots support up to 2TB SSDs. To upgrade or add an SSD:

1. Follow steps 1 and 2 from the RAM upgrade section to power off and open the device.
2. Locate the M.2 SSD slots. If replacing, remove the existing SSD by unscrewing the retaining screw and gently pulling it out.
3. Insert the new M.2 SSD into the slot at an angle, then push it down and secure it with the retaining screw.
4. Close the chassis and reconnect all cables.

Image 6.1: Internal view of the KAMRUI E3B Mini PC, illustrating the locations of the DDR4 SO-DIMM and M.2 2280 SSD slots for upgrades.

6.3 Cooling System Maintenance

The Mini PC features a large fan cooling system with dual air vents and a professional infusion structure to maintain optimal operating temperatures. To ensure efficient cooling:

- Ensure the air vents are not obstructed.
- Periodically clean dust from the vents using compressed air.
- Operate the device in a well-ventilated area.

Image 6.2: Exploded view of the KAMRUI E3B Mini PC, detailing its large fan cooling system with heat dissipation area and dual air vents.

7. TROUBLESHOOTING

This section addresses common issues you might encounter with your KAMRUI E3B Mini PC.

7.1 No Power

- Ensure the power adapter is securely connected to both the Mini PC and a working electrical outlet.
- Verify the power outlet is functional by plugging in another device.
- Try a different power outlet if available.

7.2 No Display Output

- Check that the HDMI or DisplayPort cable is securely connected to both the Mini PC and the monitor.
- Ensure the monitor is powered on and set to the correct input source (HDMI, DisplayPort, or USB-C).
- Test with a different cable or monitor if possible.

7.3 No Internet Connection

- **Wired:** Ensure the Ethernet cable is properly connected to the RJ45 port and your router/modem. Check your router/modem status.
- **Wireless:** Verify WiFi is enabled in Windows settings. Ensure you are connected to the correct network and have entered the password correctly. Restart your router/modem.

7.4 Peripherals Not Responding

- Try connecting the peripheral to a different USB port.
- Ensure the peripheral has power (if applicable) and its drivers are installed.
- For Bluetooth devices, ensure Bluetooth is enabled and the device is properly paired.

If you encounter issues not covered here, please refer to the Warranty and Support section for assistance.

8. SPECIFICATIONS

Below are the detailed technical specifications for the KAMRUI E3B Mini PC:

Feature	Specification
Processor	AMD Ryzen 7 5825U (8 Cores, 16 Threads, 2.0 GHz base, up to 4.5 GHz turbo)
Graphics	AMD Radeon RX Vega 8 (8 Graphics Core Count, 2000 MHz Frequency)
RAM	16GB DDR4 (2x SO-DIMM slots, expandable up to 64GB)
Storage	512GB M.2 SSD (1x M.2 NVMe/SATA, 1x M.2 SATA, up to 2TB each)
Operating System	Windows 11 Pro
Video Output	1x HDMI 2.0 (4K@60Hz), 1x DP 1.4b (4K@60Hz), 1x USB3.2 Gen2 Type-C (4K@60Hz)
USB Ports	2x USB3.2 Gen2 Type-A (10Gbps), 4x USB3.2 Gen1 Type-A (5Gbps), 1x USB3.2 Gen2 Type-C (10Gbps)
Network	WiFi 6, Bluetooth 5.2, 1x RJ45 Gigabit Ethernet
Audio	1x 3.5mm Audio Jack
Dimensions	Approximately 12.8 x 12.8 x 4.13 cm (5.04 x 5.04 x 1.63 inches)
Weight	Approximately 1.37 kg (3.03 pounds)

9. WARRANTY AND SUPPORT

9.1 Warranty Information

The KAMRUI E3B Mini PC comes with a **12-month warranty** from the date of purchase, covering manufacturing defects and hardware malfunctions under normal use. Please retain your proof of purchase for warranty claims.

9.2 Customer Support

For technical assistance, troubleshooting, or warranty inquiries, please contact KAMRUI customer service:

- **Email:** support@kamrui.com

Please provide your product model (E3B) and a detailed description of your issue when contacting support to ensure a prompt resolution.

10. IMPORTANT NOTES ON VIDEO CONTENT

This manual does not include embedded videos. While the product listing indicates the presence of videos, the necessary metadata (such as 'creator_type' and specific video URLs) required to verify their relevance and origin for inclusion in this instruction manual was not available. Therefore, no video content has been embedded to ensure adherence to content guidelines.